

Appl. No. 10/661,113  
Response dated February 3, 2005  
Reply to Office Action of Nov. 12, 2004

IN THE CLAIMS:

Please amend the claims to read as follows:

Claims 1-9 (Canceled)

10. (Previously Presented) A catamaran surface effect ship comprising a catamaran hull having a hull baseline, spaced apart hulls connected with a deck, and an integral propulsion system for propelling the hull,

- a) the hull having forward and aft flexible seals that enable pressured air to be trapped in an air space that is positioned generally in between the hulls and in between the seals,
- b) the hull containing a powered lift fan system for transmitting air to the air space, and
- c) wherein each hull is absent chines, providing a smoothly curved bottom and side walls extending upwardly from the smoothly curved bottom, wherein the propulsion system includes propellers, each propeller having a propeller shaft tube integral with the hull.

11. (Original) The catamaran surface effect ship of claim 10, wherein the propeller shaft tube does not extend below the baseline of the hull.

Claim 12 and 13 (Canceled)

14. (Currently Amended) The apparatus of claim 10-13, further comprising a propeller shaft supporting each propeller wherein the propeller shaft is oriented nearly parallel to the ship's bottom.

15. (Currently Amended) The apparatus of claim 10-13, wherein the propeller has a shaft that is oriented above the ship's bottom.

16. (Previously Presented) Apparatus including a vessel designed to operate as both a catamaran and air cushion vessel comprising:

catamaran hulls that are without hard chines, for traveling at low speed in a displacement mode; a propulsion system that includes one or more surface piercing propellers for operating at high speed in an air cushion, dynamically supported mode, wherein the propulsion system includes propellers, each having a propeller shaft tube integral with the hull.

17. (Previously Presented) The apparatus of claim 16, wherein the propeller shaft tube does not extend below the baseline of the hull.

Appl. No. 10/661,113  
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18. (Currently Amended) The apparatus of claim 10 +2, wherein the vessel has a dynamically supported draft that is much less than its static draft.

19. (Currently Amended) The apparatus of claim 10 +2, wherein the catamaran hulls have parabolic waterlines.

20. (Canceled)

21. (Currently Amended) The apparatus of claim 10 +1, wherein the propulsion system includes combined diesel and gas turbine power generation units.

22. (Currently Amended) The apparatus of claim 10 +1, further comprising gas turbines for generating lift air pressure.

23. (Currently Amended) The apparatus of claim 10 +1, further comprising forward mounted foil stabilizers for facilitating ride stabilization and load compensation, at high and low speeds.

24. (Previously Presented) The apparatus of claim 23, wherein the foil stabilizers generate transverse roll forces that improve high speed maneuvering.

25. (Canceled)

26. (Currently Amended) The apparatus of claim 10 +1, further comprising a deck and superstructure on the hulls.

27. (Currently Amended) The apparatus of claim 10 +2, wherein the hulls have smoothly curved bottom portions.

28. (Currently Amended) The apparatus of claim 10 +1, wherein the hulls have smooth side portions.

29. (Original) The apparatus of claim 28, wherein the side portions are generally vertically oriented.

30. (Currently Amended) The apparatus of claim 10 +1, wherein the hulls do not generate dynamic lifting forces.

31. (Canceled)

32. (Currently Amended) The apparatus of a claim 10 +1, wherein the hulls are non-lifting side hulls.

Appl. No. 10/661,113  
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33. (Previously Presented) The apparatus of claim 32, wherein the side hulls are molded forms featuring parabolic waterlines and semi-elliptical cross sections to minimize the characteristic wave trains associated with low speed.

34. (Currently Amended) The apparatus of claim 10+, wherein small lifting surfaces on the hulls provide load compensation, ride control and high-speed stabilization.

35. (Original) The apparatus of claim 34, wherein the small lifting surfaces comprise two independently controlled wing sections mounted port and starboard below the waterline, inboard and forward on the side hulls.

36. (Currently Amended) The apparatus of claim 10+, ~~further comprising retractable wherein the air cushion seals are retractable.~~

Claims 37-40 (Canceled)

41. (Previously Presented) The apparatus of claim 16, wherein low speed is travel at a Froude number between about 0 and about 0.3 and high speed is 50+ knots.